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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,291	04/08/2004	Gurtej Sandhu Sandhu	303.085US7	8616
21186	7590 06/26/2006		EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			LE, DUNG ANH	
P.O. BOX 2938 MINNEAPOLIS, MN 55402		ART UNIT	PAPER NUMBER	
			2818	
			DATE MAILED: 06/26/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.   Applicanting   Application No.   Applicanting							
Examiner		Application No.	Applicant(s)				
DUNG A. LE  -The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - In the 30 MONTH's from the maining date of this communication.  - If NO period for reply is specified above, the maining date of the communication.  - Failure to reply within the size or excended period for reply with by statute, came the application to be applicated to be size of the summinication.  - Failure to reply within the size or excended period for reply with 5 status.  - Status  - This action is FINAL.  - 2b) This action is FINAL.  - 2b) This action is FINAL.  - 2b) This action is final the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213.  - Disposition of Claims  - 4) Claim(s)		10/820,291	SANDHU ET AL.				
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be awaited under the providers of 37 CFR 1.138(b). In no event, however, may a reply be finedly filed  If NO period for reply is specified above, the maximum statutory period will apply and will expres SIX (b) MONTHS from the malling dato of this communication.  Failure to received by the Office later than three marinins after the maining date of this communication.  Failure to received by the Office later than three marinins after the maining date of this communication, even if timely fixed, may reduce any seared patholic than 40 planement. Set 97 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on		ears on the cover sheet with the o	correspondence address				
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of the may be available under be provided on 5 of ZF6 1.33(a). In no event incovere, may a reply be timely fled after SIX (6) MONTHS from the mailing date of this communication.  If NO provided the reply is specified down, the mistame traductory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any extended patent term adjustment. See 37 CF6 1.704(b).  Status  1)  Responsive to communication(s) filed on	• •	/ IC CET TO EXPIRE 4 MONTH	(C) OD TUIDTY (20) DAYC				
1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s)	<ul> <li>WHICHEVER IS LONGER, FROM THE MAILING DA</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period w</li> <li>Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing</li> </ul>	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D. (35 U.S.C. § 133).				
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Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	9) The specification is objected to by the Examine	r.					
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## **DETAILED ACTION**

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## Election/Restrictions

## Claims 1-32 are pending in this application.

- 1. This application contains claims directed to the following patentably distinct species of the claimed invention:
- a) Species I, e.g. claims 1-5 and 6-9: Method for depositing metal on a semiconductor device having a substrate, an exposed first surface and an exposed second surface by applying a second voltage for removing metal ions from the exposed first surface without retaining metal ions on the exposed second layer.
- b) Species II, e.g. claims 10-15, 16-20 and 21-24: Method for depositing metal on a semiconductor device having a substrate, an exposed first surface and an exposed second surface by applying a second voltage/second duty cycle for removing metal ions (copper) from the exposed first surface with retaining metal ions (copper) on the exposed second layer.
- c) Species III, e.g. claims 10-15, 16-20 and 25-28: Method for depositing metal on a semiconductor device having a substrate, an exposed first surface and an exposed second surface by applying a second voltage/second duty cycle for removing metal ions (nickel) from the exposed first surface with retaining metal ions (nickel) on the exposed second layer.
- d) Species IV, e.g. claims 10-15, 16-20 and 29-32: Method for depositing metal on a semiconductor device having a substrate, an exposed first surface and an exposed second surface by applying a second voltage/second duty cycle for removing metal ions (palladium) from the exposed first surface with retaining metal ions (palladium) on the exposed second layer.

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2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claims is finally held to be allowable. Currently, claims 10 and 16 are generic claims in Species II to Species VI. Applicant(s) is(are) advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is all claims are generic is considered non-responsive unless accompanied by an election.

- 3. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.141. If claims are added after the selection, applicant must indicate which are readable upon the elected species. M.P.E.P. 809.02(a). Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 of the other invention.
- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filled petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(h).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung A. Le whose telephone number is (571) 272-1784. The examiner can normally be reached on Monday-Friday 8:00am- 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, M. Smith can be reached on (571) 272-1907. The central fax phone numbers for the organization where this application or proceeding is assigned are (571)272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUNG A. LE Primary Examiner
Art Unit 2818